#### RIC 2005 Session: G4 – Risk Informed

#### Risk Management Training & Education

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# History of Training/Educating RM/PRA Engineers

- IPE/IPEEE NUREG/CR-2300
  - consultant training courses
- PRA Certifications experience sharing
- RG 1.174/1.176 INPO ACAD 98-004
- Risk-Informed Applications self study, mentoring, qualification cards, OJT
- PRA Quality RM/PRA Engineer Quality

## Sources of RM/PRA Engineer Training & Education

- Textbooks and Reports
- Published PRAs
- Conference Proceedings
- Standards and Reg. Guides
- Utility in-house Training Programs
- Consultant Training Programs
- NRC SRA & RI training courses
- University Courses

### Mandate for Risk Management Training & Education

- RG 1.174, Section 2.5, Quality Assurance: "Use personnel qualified for the analysis"
- RG 1.200, Section 2.2, Industry Peer Review Program: "The team qualifications determine the credibility and adequacy of the peer reviewers ... Each member of the peer review team must have technical expertise in the PRA elements he or she reviews ..."
- ASME PRA Standard, Section 6.2.3: "The peer reviewer shall also be knowledgeable (by direct experience) of the specific methodology, code, tool, or approach ... that was used in the PRA Element assigned for review."

# EPRI Project: Development Of PRA Qualification Guidance And Curriculum

- Survey Existing Practices utilities, vendors/consultants, NRC/labs, universities
- Inventory references, procedures, lesson plans, qual cards, training/education courses
- Define technical topics and curriculum for RM/PRA engineer training/education
- Identify gaps, training/education needs, techniques